

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.

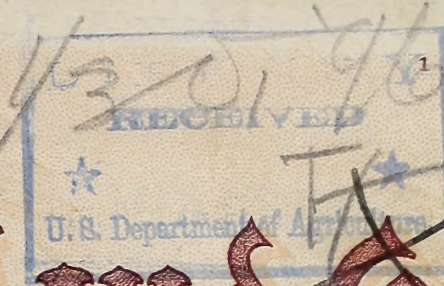




2nd. 12/13. 95 W.A.Z-0  
62.43

ANNALS, MAY '95

1893=4  
Northern Grown Potatoes



L. L. MAY & CO.

NURSERYMEN,  
FLORISTS, AND  
SEEDSMEN

AND PROPAGATORS  
OF VALUABLE SEED  
POTATOES.

ST. PAUL,  
MINN., U.S.A.



A FIELD OF THE "GREAT NORTHERN" AT HARVEST TIME.



## INTRODUCTORY.



WE TAKE PLEASURE in again presenting to our friends and patrons our Catalogue of Northern Grown Potatoes—this time for 1893-4, and it is with much pride and satisfaction that we are able to place within reach of our friends, and former very liberal patrons, such a magnificent list of seed potatoes. We can say without egotism that this is the most complete catalogue of valuable potatoes issued by any house in the United States, comprising as it does, the varieties of real merit—every variety being most rigidly tested before offering for sale.

Being aware that this state was capable of originating and producing the finest potatoes in the world, both for seed and market purposes, we commenced working on them in a small way a few years since, until at this time we claim to grow and sell more seed potatoes of real merit than any two houses combined in America. Our business reputation and integrity being at stake as well as our reputation as potato growers, we could not afford to place any variety on the market without first thoroughly testing and thus being prepared to set forth its true merits. Our long experience (which has, by the way, cost us vast sums of money, and much time) surely ought to be of value to our customers in the way of placing within their reach the most valuable varieties to be found in America, and we believe this is fully appreciated by our patrons. They could not hope to be thus conversant with potatoes, varieties, etc., without first employing the same amount of time and money. We take pride in saying that our sales have more than doubled each season since entering this business.

We have heretofore found it beneficial both to purchasers and ourselves, to offer gold prizes for best exhibit of potatoes from our stock, and shall continue to carry out this policy. The first prize we ever paid was \$50 in gold for one peck of potatoes, Larson Bros., Market Gardeners near this city being the winners.

Potatoes are put up in any quantity desired, but not less than \$1.00 worth of any one variety will be sold, unless varieties quoted by the pound, and not more than twenty-five bushels of one variety will be sold to one party.

We beg to call your attention especially to our "Great Northern" and "World's Fair." We control the full stock of the former, and the greater portion of the latter. These are two very valuable sorts, and we suggest that all desiring to avail themselves of the opportunity to purchase of this stock, do so early, as the chances are that the stock will not hold out the full season. Salesmen will be notified as soon as stock is exhausted.

Thanking each and all of our patrons for their very liberal patronage in the past, and trusting we may merit your valuable trade in the future, we beg to remain

Very truly yours,

L. L. MAY & CO.

## GOLD PRIZES

### \$100.00 FOR ONE PECK OF POTATOES.

~~Carman~~ No. 1

WE will pay \$100.00 in Gold for the finest specimen peck of the ~~Great Northern~~ and World's Fair, each, making \$200.00 in prizes. The seed stock to be purchased of us and paid for on delivery. Conditions: All such potatoes for competition must be shipped to us by express—transportation charges fully prepaid, and to arrive at St. Paul not later than September 5th, 1894<sup>95</sup>

The potatoes for competition will then be exhibited at the Minnesota State Fair, and the decision as to prizes will be wholly in the hands of the State Fair authorities. Exhibits will show name of grower, and also the fact that the original seed came from potato farms of L. L. May & Co.

ST. PAUL, MINN.

L. L. MAY & CO.



## INSTRUCTIONS.

ALL potatoes or other articles listed in this catalogue are delivered freight paid to the railroad station nearest to purchaser's residence, and such station must be in every instance designated on order blank, in blank space for this purpose.

No residence deliveries of these articles made.

Orders will not be accepted or filled for a less quantity than the smallest quantity quoted on such variety. Half bushels sold at peck rates, unless otherwise noted. Where a barrel of potatoes are ordered of two varieties—one-half of each—25 cents will be added to the regular barrel rates of such varieties to cover extra cost of putting up. We cannot accept orders for more than two varieties in a barrel. No extra charges for bags or barrels. Weight of potatoes, 60 pounds to the bushel. Safe arrival at point of destination guaranteed.

Our prices are not to be confounded with catalogue prices. Our rates are for seed delivered freight paid, while buying through catalogues, purchaser always pays freight or express, and in many cases cost of packing, etc., all of which means about as much more as the first cost of the potatoes.

**Change of Seed, and Northern Grown Seed.**—The importance of changing seed, and point of origin cannot be emphasized too strongly. Minnesota potatoes have a national reputation—healthy stock, productiveness, cooking, marketing, and keeping qualities. While our Eastern and more Southern competitors are doing all they can to sell their own stock, they frankly concede that northern and Minnesota grown potatoes are superior in every respect. Seed should be changed every season. Our experienced growers, even when planting the same varieties each year, prefer to come to us for their stock rather than use their own. The yield is much heavier, the stock purer, freedom from diseases guaranteed, and the crops bring from one-half to two-thirds more in market.

While we aim to furnish the best of the older sorts of potatoes, our specialty is new and valuable sorts, which we have tested to the extent of establishing their superiority beyond a question.

The book titled "The New Potato Culture" which is brim full of valuable information as to the proper manner of planting, caring for potatoes, how to work the soil, the sort of fertilizer to use, etc., etc., we will furnish for \$1.00 each, cash to accompany the order. We believe it well worth \$5.00 and if we could not secure another copy would not take \$10.00 for the one we have.

One of these books free with every order for potatoes to the amount of \$5.00 or over, if specified on order blank.

Below we quote from the introduction.

**Introductory page of "The New Potato Culture" by Carman, who has devoted fifteen years to potato study:**

"For the past fifteen years, during the growing season, I have given a part of my time to potato experimentation, in the hope that I might throw some additional light upon the various questions involved in the central problem, 'How to increase the yield without proportionately increasing the cost of production.'

"It often happened that, in the soil of my home grounds, some hills would yield enormously, while others would yield little. What was this owing to? What kind of manure or culture—what preparation of the soil would insure the maximum crop? Would stable or cow manure, hen manure, or a compost of the three? Would lime, plaster, salt, muck, wood ashes, muriate or sulphate of potash, bone, phosphatic rock, fish, flesh, blood, sulphate of ammonia, nitrate of soda, separately or in any combination, effect this? Would it be possible so to fit the soil as materially to increase the yield? What would be the best depth to plant the seed? How much seed should be planted—single eyes, two, three or four eyes; half potatoes, whole potatoes, stem-ends, or seed-ends? Should the manure or fertilizer be placed under or over, and how much should be used? Should the soil be firmed or rendered as loose and friable as possible?

"These were the individual questions suggesting themselves which made up the central problem, 'How can we increase the yield of potatoes without proportionately increasing the cost of production?' As experiments were carried on from year to year, it was found that the yield from this experiment plot was increased at the rate of from 100 to 600 bushels to the acre; that portions yielded at the rate of over 1000; that certain hills and certain varieties, treated apparently the same as the rest, yielded over 1,500 bushels to the acre. Would it be possible to ascertain what the exact conditions were which gave such yields? Would it be possible to approach them on acres instead of plots? Would it be possible to furnish equivalent conditions to acres in an economical way?"



The following will give an idea as to Mr. Carman's ability to grow potatoes and give information as to how to produce big results.

### HOW THE CONTEST CAME ABOUT.

"During the winter of 1888 I made the statement in print that if I could not raise *at the rate* of over 700 bushels of potatoes to the acre on a given plot in my experiment grounds, by what is known as the Rural Trench System of cultivation, let the season be favorable or unfavorable, I would forfeit \$50 if any one would pay the same amount in case of my success—the money in either event to be donated for some charitable purpose. The challenge was accepted by Mr. Wilder Atkinson, the editor of the *Farm Journal*, of Philadelphia, Pa."

### THE RESULT.

"Friday, the 28th of September, every member of the committee appointed to determine the yield was present, together with some 40 others from various parts of the country. Previous to digging the crop, the ground was carefully measured, to give accuracy to the computation.

"The No. 4 yielded at the rate of 644 bushels to the acre. The No. 2 yielded at the rate of 1,076 bushels to the acre. No. 3 was a comparative failure, owing to the vines having been destroyed by the flea beetle. The yield was only at the rate of 276 bushels to the acre. As this potato occupied two-fifths of the entire plot, the yield was thus reduced to below 700 bushels to the acre. It will appear to the reader, as was evident to the judges and others who were present, that, had the whole of the plot been planted with No. 2, the yield would largely have exceeded 700 bushels to the acre, and the contest would consequently have been decided in our favor,

### REPORT OF THE JUDGES.

"We, the undersigned committee, having been appointed for the purpose of calculating the yield of potatoes grown upon the 'contest plot' at River Edge, Bergen County, N. J., do hereby certify that we saw the potatoes dug and measured the yield thereof. We found it to be at the rate of 585 bushels per acre."

(Signed) PETER COLLIER,  
W. A. STILES.  
J. C. HAVILAND,  
L. C. BENEDICT,  
P. T. QUINN,  
*Committee.*

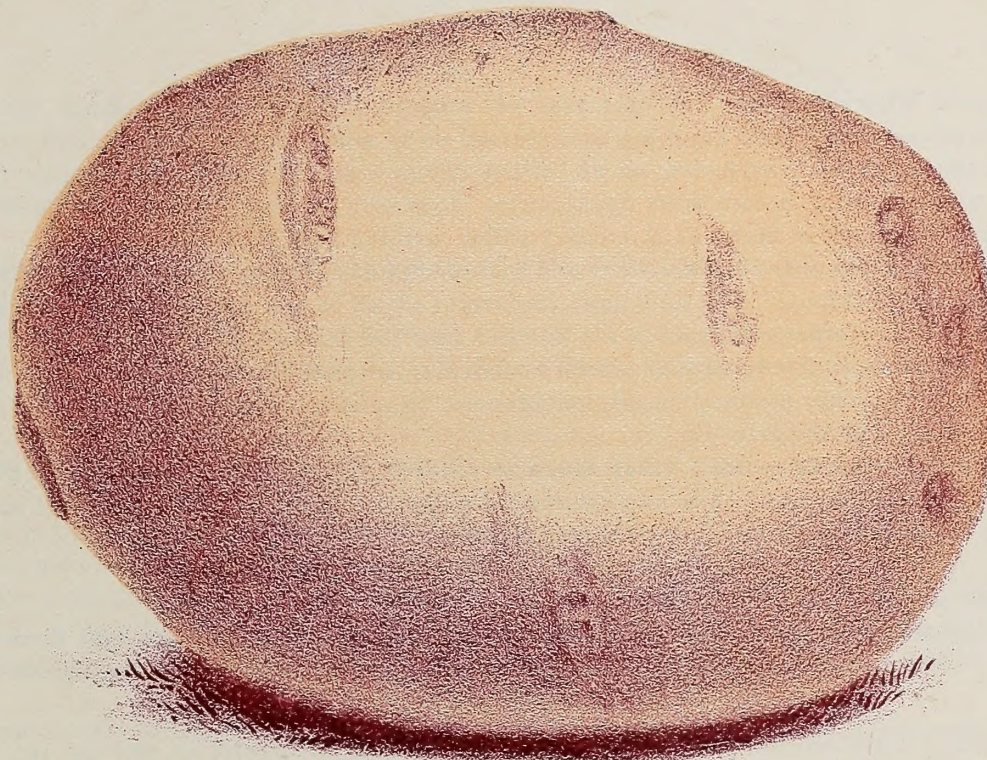
Subscribed and sworn to this 28th of September, 1888, before me,

JOHN G. WEBB,  
*Justice of the Peace.*

The book "New Potato Culture" will not be sent to purchasers on \$5.00 or larger orders unless entered on order blank by agent.

Sell one of these books to every man who grows potatoes. He will thank you for doing it, later on. Remember when these books are sold cash must accompany the order when sent to us. We will not under any circumstances charge them to salesmen's accounts.





## WORLD'S FAIR.

(BLIGHT PROOF.)

Price 75c. per pound ; two pounds, \$1.25 ; three pounds, \$1.50 ; five pounds, \$2.00.

THIS variety was originated in Wisconsin in 1892, by a potato grower of wide reputation and long experience. It proved to be such a magnificent thing, approaching nearest to the perfect and ideal potato, in fact seeming to eclipse so perfectly all other varieties of known merit, that the originator considered that no more worthy name could be given it than the "World's Fair," and so far as we are able to judge it promises to be the greatest acquisition to the potato family ever introduced. We believe it to be a seedling of the "Freeman," and surely it could not have chosen a finer parent. Our only regret about the "World's Fair" is that we will not have seed stock enough to furnish every farmer in the country at least a peck, and at a low price, as they seem bound to be the money-making potato as soon as sufficient stock can be produced to place in the hands of growers. Our stock was secured at enormous expense, but another season we hope to be able to place a large quantity on the market.

For description we cannot do better than to quote the originator's own words as follows :



"It attracted universal admiration at Wisconsin State Fair last year on account of its wonderful beauty and evident excellent quality. It was awarded the first premium there. We never have grown anything that pleased us so much in every respect, and we have tested nearly every variety of any value. As this World's Fair will eclipse any fair projected, so we believe this new seedling will take a similar place among the different varieties of potatoes. In the first place, it is just about an ideal potato in its appearance. It is very smooth, eyes so nearly even with the surface as to be almost imperceptible : perfectly symmetrical in form and outline ; skin, creamy white, covered with a netting.

Then, in the second place, it is of the finest quality. When we tested it on our table it was pronounced by every member of the family the best they had ever eaten ; fine grained, mealy, white, delicious. Last and most important of all it has proved itself a great yielder. It grows a very strong bushy top, with tubers good sized and very numerous, compact in the hill and near the surface.

Almost every new potato that is introduced is chiefly valuable in one particular, or possibly in two. But here is something that seems to possess all of the requisites of a first-class variety : quality, productiveness, smoothness, handsome appearance, symmetry of form, strong, vigorous tops, and excellent habits of growth. In season it is medium early.

In comparison with the "Freeman" the originator adds: "Our Freeman did well for us, but, after all, not so well as our World's Fair on the same ground, by a difference of twenty-five bushels per acre. The two varieties are similar. Both are beauties. We cooked some of each at the same time and could see no difference in quality. In that respect both are perfect, but World's Fair is ahead in yield."

*The following sample crop of World's Fair potatoes, grown on one acre, was secured from the following parties:*

See what the following parties have to say about the World's Fair :

D. G. HARRISON, Morrison, Ill.: "I harvested one hundred and two potatoes from the little one I received from you."

ALBERT GLEASON, Castleton, Ill.: "The sample tuber "World's Fair" potato which you sent me last Spring did well. It is a very handsome variety, a strong grower, and *blight proof*."

GEO. M. GREENWAY, Dartford, Wis.: "I planted the potato World's Fair you sent to D. Greenway, and can say it is very fine. I had one baked and never ate a finer one. I think you have the coming potato in the World's Fair."

CHAS. A. CHANTER, Secretary Kilbourn City Horticultural Society, Kilbourn City, Wis.; "I have much pleasure in informing you that your World's Fair potato is a wonderful success, and can highly recommend it as a good potato and a big cropper."

WILL H. PARK, Dorchester, Mo.: "The World's Fair potato sent us, yielded a peck of fine tubers. The yield would probably have been still greater if the seed potato had reached here in time for early planting, the season being unfavorable for late planted crops. We think the World's Fair potato is going to prove very prolific and fine for table use."

GEO. H. WEED, Lanark, Ill.: "The World's Fair potato that I received from you last Spring contained five eyes, was planted April 26, and dug Sept. 15. Received fourteen pounds of fine potatoes, three of which weighed a pound. All were good sized and fine flavored. I believe this potato is the finest I ever raised, and if you have seed to spare, I must have some for another year."



J. L. SMITH, Hazelwood Dairy, Spokane, Wash. : "I did not get the World's Fair potato until it was very late, having been in the office here two weeks, therefore was late for planting.

I put it on the outside of the patch and next to the chicken run, but in spite of all its hardships I must say it is a wonderful potato. It is a great yielder, as we had over a peck from it. Besides that, the gophers ate two hills of them. They are very fine shape. I think they are the best of twenty-five kinds planted."

D. J. Piper, Forreston, Ill. : "In relation to the World's Fair potato you sent me. It only weighed about two ounces and had nine eyes. I planted each eye separate, about eighteen inches apart, and right in the middle of a lot where I had other sorts. Its yield was eleven pounds of first-class potatoes.

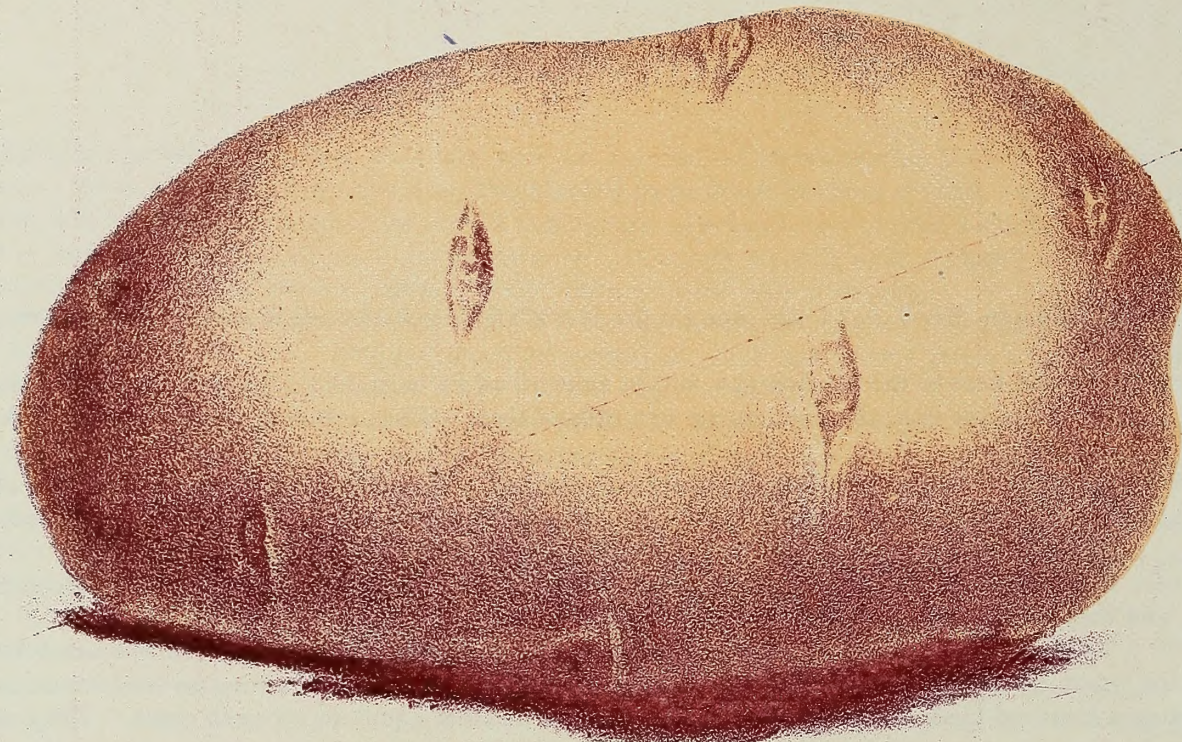
We baked one and it was very fine in quality, and very white flesh, dry and mellow. Just what I like in potatoes. Its yield was at least four times as great as the other potatoes, and they were all of good large size. I think you have a good one."

J. W. BAKER, Tiskilwa, Ill. : "Notwithstanding the most unfavorable season we have ever known (except one) your World's Fair potato did exceedingly well, making a fine yield of shapely, handsome tubers of good size. The tops were strong and vigorous, covering the ground well, and entirely free from blight. Among a hundred kinds, fifty of them being novelties, but few equal or surpass them. They are very smooth and white, eyes on surface.

I think they did full as well, if not a little better, than the Freeman. If not greatly mistaken, yours is one of great merit, and will prove a leader among the novelties."

PETER PEARSON, Spiritwood, N. Dak. : "You sent me three little specimens of your new World's Fair potato, each measuring about two inches in length, so you can imagine the size of the cuts. Well, I cut them very carefully to single eyes and planted one in a hill, and have dug from same forty-seven pounds, eighty per cent. being marketable potatoes. At the rate of yield realized by me with the above mentioned small potatoes, the yield per acre amounts to the rate of eight hundred bushels of as fine eating potatoes as my wife ever cooked. You have a bonanza in this potato if you make good use of your opportunity."





### THE GREAT NORTHERN.

WE are proud to be able to introduce such a magnificent variety as the Great Northern, and we are staking our reputation that every purchaser of this variety from us will thank us many times for selling him the seed. Originated in Northern Wisconsin, the entire stock now being under our control. A seedling of the famous "Early Thorburn" and one of the earliest varieties ever introduced. Its earliness combined with its magnificent cooking and eating qualities—which we regard equal to the Freeman—places it at the head of the list as a valuable market variety.

In appearance one of the most handsome potatoes we have ever seen, although perhaps not quite as symmetrical in shape. Being of light flesh color, and changing to brighter red about the eyes, and especially at seed end, it is bound to make a market variety of quick sale and to bring a price considerable in advance of other good sorts. Eyes few and not deeply set; flesh of snowy whiteness, and as above stated, quality superb. A magnificent yielder, with reasonably good care and intelligent handling 800 bushels to the acre should be a fair crop, tubers growing compactly in the hill, of uniform size and all maturing; an immensely strong grower, foliage of a rich deep green, to a degree highly ornamental.

We account for our never having discovered the potato bugs on this variety in that it is such a rank grower and so much acid in the foliage, that bugs prefer to secure food from the more tender sorts. Neither is this variety subject to blight or rot in any shape. Unlike most other early varieties, it is also a good keeper. As in the case with the World's Fair, we regret that the stock this season is not large enough to offer seed in larger quantities, and at a very low price, as we know both sorts will prove a boon to potato growers as fast as stock can be desimated. Make your purchase of these two varieties early while stock holds out. Orders received after stock is exhausted will be returned to purchasers.

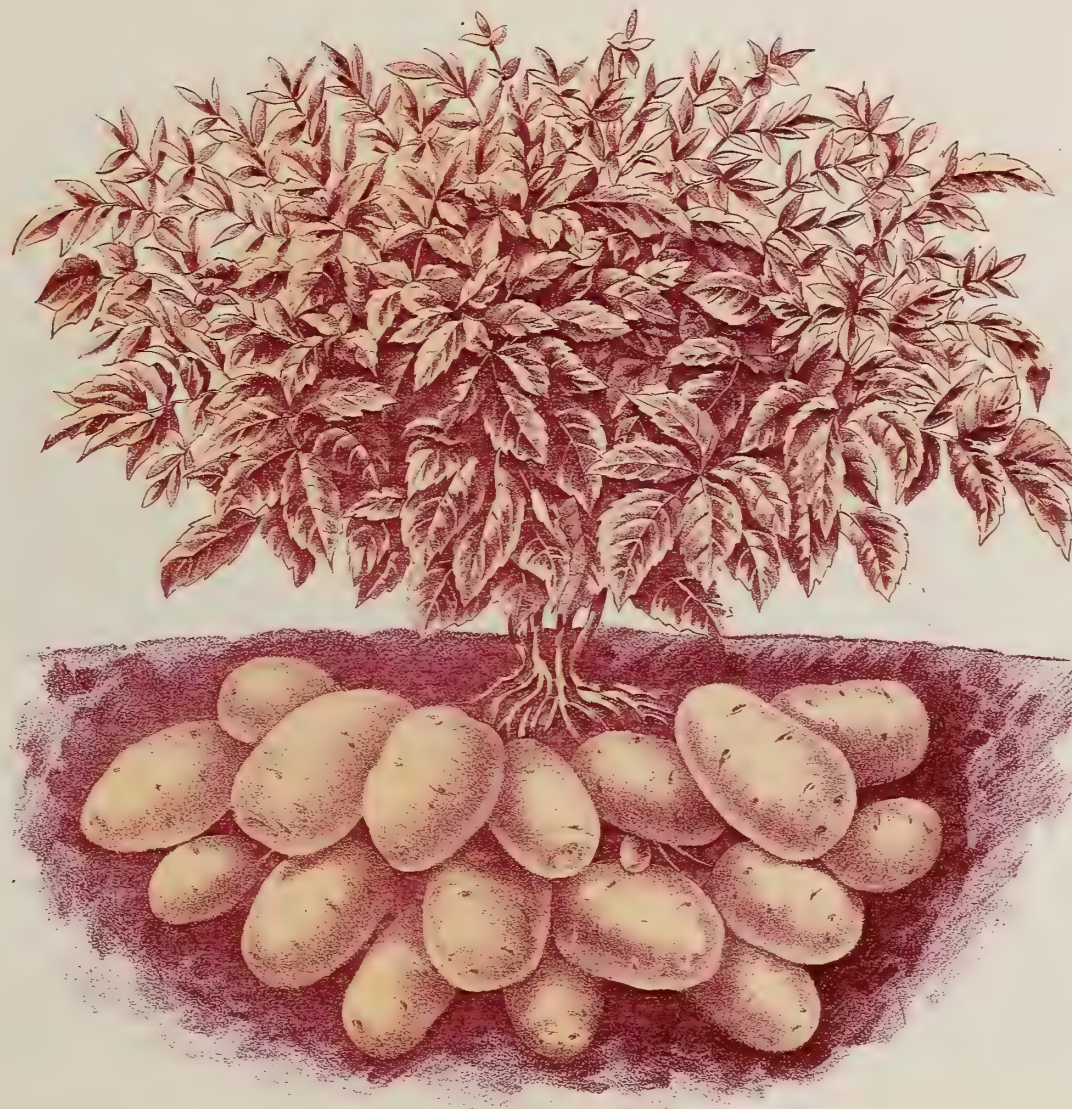
Price of Great Northern. \$1.00 per one-half peck, \$2.00 per peck, \$3.50 per half bushel, \$6.50 per bushel, \$15.00 per barrel of 165 lbs.



**The  
GREAT  
NORTHERN  
in the  
Hill.**

---

**Uniform size,  
Cooking Evenly  
and no  
Hollow Ones.**



**95  
out of  
100  
Good  
Marketable  
Potatoes.**

---

**A splendid keeper.  
Its Hardy  
Constitution making  
it well able to  
withstand reverses  
in the way of  
drouth,, wet and  
insects.**





### THE FREEMAN.

So much has been said and written of the Freeman that it hardly seems necessary to give a lengthy description here, or quote from the many hundred testimonials. It has been remarked by a prominent potato grower that this variety contains more new fresh blood than any variety since introduction of the Early Rose. Originated near St. Paul, this state. The tuber is oval in shape, russet in color covered with netting; flesh very white, both when raw and cooked, extremely fine grained, and in flavor the ideal potato. The marked features of this potato are its extreme earliness and long keeping qualities. The originator states that thirty-nine days from planting he has had fully ripe potatoes on his table and of good size. They ripen here in advance of both Early Rose and Early Ohio. Tubers have never been known to rot or rust and no hollow ones; very few small ones.



Vine a fine grower, but not rank or scraggy. The Freeman is probably one of the most handsome potatoes ever placed on the market. As high as one hundred and twenty pounds of good potatoes have been harvested from one pound of seed planted. The Freeman has not as yet been placed on the market for consumption purposes, as stock has never yet been produced to supply the demand for seed.

The first season it was sold at \$3.00 per pound and the stock was quickly exhausted at this figure. We secured at enormous expense a large quantity of the true seed stock, and from our plantings of the same we will be able to supply our many thousand customers with a limited quantity each.

Price, \$1.00 per one-half peck, \$2.00 per peck, \$7.00 per bushel, \$15.00 per barrel of 165 lbs.

MR. T. B. TERRY had this to say about the Freeman potato in the September 19th, 1891 issue of the *Practical Farmer*:

"Some readers of the *Practical Farmer* will remember our planting a barrel of the Freeman potatoes last spring. We cut the seed up pretty fine for field culture and spread it over ground enough to give them a fair chance. The barrel contained 165 lbs. of tubers when it came last fall. The Freeman has but few eyes, and many of the potatoes were too large to spread well for seed. We planted them about the 1st of May by hand. Some of the seed 'fell upon stony places' or 'among thorns,' but all went into good ground. I will say, however, that no manure or fertilizer of any kind was used except clover and a small patch of old June grass sod. There was actually no forcing whatever except in the line of tillage. In that respect we did our best.

"The surface was kept mellow by means of cultivator and pronged hoes, without any regard to time spent. They were planted four inches deep on half the ground and three on the rest. They were never hilled up at all, except just as the vines began to die we went through with a hoe and covered some tubers that had raised up out of the ground, because there was no longer room for them to expand in it. Right here we made a mistake. We covered the seed all at once. These little pieces would have done better if planted in holes four inches deep and the dirt but half put back at planting time. After the plants got up and started, the rest could have been gradually worked in around them. As it was, although they were covered with the finest earth, they were a long time getting up to daylight where planted and covered four inches deep.

"Well, now, what was the result? An experienced potato grower who was over here yesterday, after looking over the potatoes said to me: 'Terry, don't you ever tell of this, because not one man in a hundred will believe it.' Perhaps he is right, but I shall tell all the same. We have 305 bushels of Freeman potatoes in our cellar, the product of that barrel of seed. The potatoes were all picked up in bushel boxes and counted and emptied after each day's digging, so there can be no mistake.

"Of course there were many hills that were not very good from such fine cut seed; but many of them, where they got a good start, were wonderful. The ground was bulged up about like half a pumpkin. Some of the potatoes were very large. Twenty of the largest filled a half bushel basket. I do not think I have had such a basket of potatoes on my farm since the Early Rose first came. They were fully as large the first year we grew them (in a small way), but were heavily manured. These were fed on clover only. The June grass patch was not so good.

"Of course the splitting of eyes could have been carried much farther, as some experts know. Possibly a thousand bushels could have been grown from that barrel of seed, but it would have taken an immense amount of labor and care. For field culture I went rather beyond the practical line."





### JUNE EATING.

EXCEPTING the Early Market (which variety ripens before tubers are fully grown) we doubt if there is a potato in existence earlier than June Eating. The Signal however with us ripens at the same time. More than one prominent potato grower however claim the June Eating to be the earliest good potato known. With our cold, backward springs here in the North, this potato is fit for table use June 20th.

Originated by the well know Thomas Crane, and is the most popular of all his varieties, excepting the Signal. In appearance it is indeed a beauty selling in advance of many other good varieties. Its color is just right to bring a handsome price in market; not rose-colored or white, but half way between; a beautiful flesh color. In quality excellent; light and floury as a snowflake. And as to yield it is next to Signal of the extremely early sorts. We believe this is the first variety known to produce three pounds of first-class eating potatoes the first year from the seed ball, one of them weighing over half pound. Tubers large, compact in hill, wholly below surface and comparatively no small ones. June Eating should find a place with Signal.

Price, \$1.00 per half peck; \$1.50 per peck; \$4.50 per bushel; \$8.00 per barrel of 165 lbs.



*Don't sell Summit—No stock.*



### THE SUMMIT.

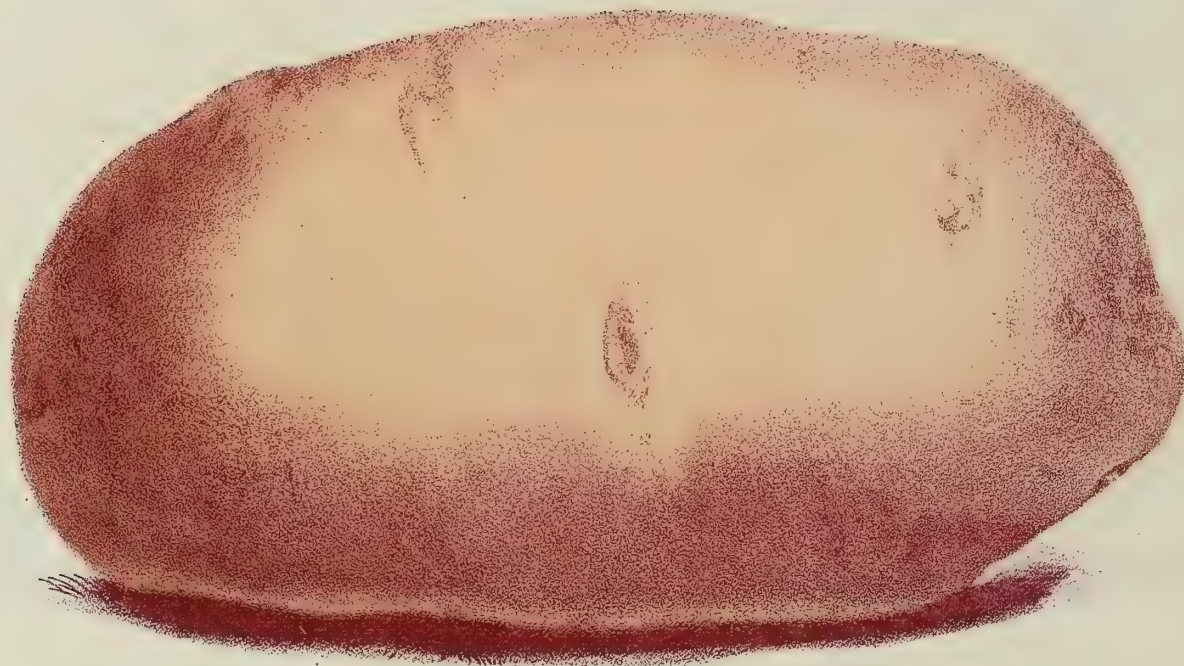
THIS is considered by all growers to be one of the finest potatoes that can be raised for a general market crop, comprising as it does the leading features which render a potato valuable and profitable for market purposes. Skin buff color—similar to its parent the Early Rose—but of finer quality, better shape, more productive and commanding a higher price in market. Flesh white, and when cooked dry and mealy and of splendid flavor. A magnificent yielder, free from rust or rot, never hollow and as near blight proof as a potato can be; season medium late.

The Summit was awarded first premium at Minnesota State Agricultural Exhibition. The *Rural New Yorker*, 1886, says: "Summit potato gave the largest yield of any tested on our experimental farm last season—at the rate of 1,210 bushels per acre.

We have grown and sold this variety for two years, and sales have more than doubled on it each season, which is in itself an endorsement not to go behind.

Price, \$1.00 per peck; \$3.50 per bushel; \$7.00 per barrel of 165 pounds.



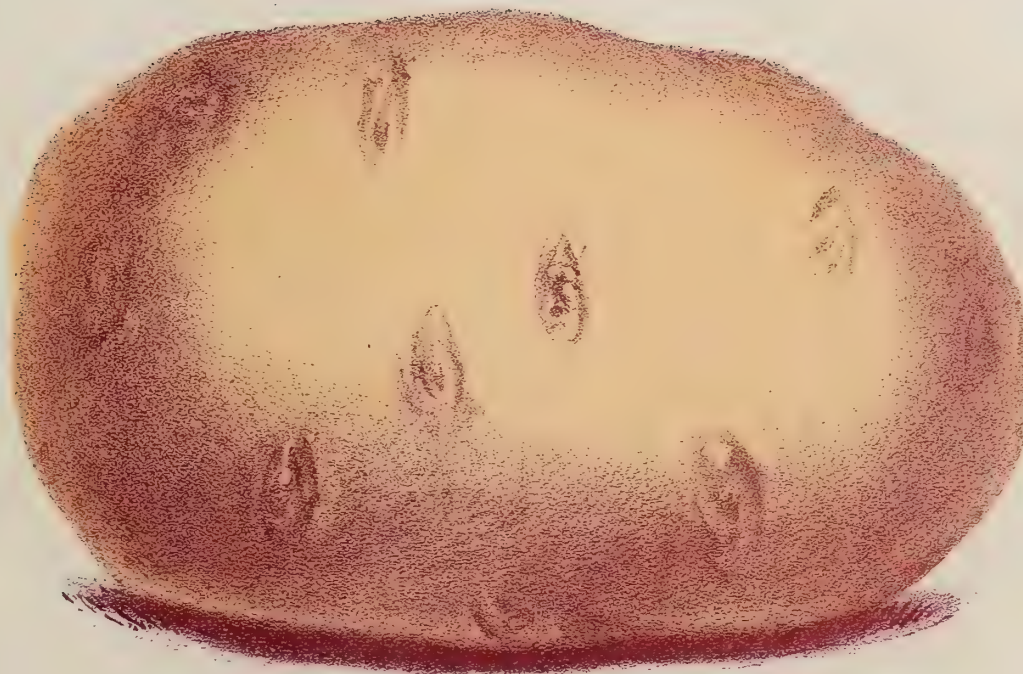


### **BROWNELL'S WINNER.**

PRONOUNCED by the originator and all well acquainted with it to be the best of the Rose class, of the late varieties. While not quite so handsome in general outline and appearance as some others, its *great productiveness*, fine eating qualities, hardy constitution, etc., make it an unusually valuable sort for general culture. An unusually good keeper, flesh remaining firm and solid until new potatoes arrive; always sure to bring a good price in market.

Price, \$1.00 per half peck, \$1.50 per peck, \$4.50 per bushel, \$9.00 per barrel of 165 lbs.





### EARLY MARKET.

WE are safe in saying that no potato grower in the entire country acquainted with this variety will make the statement that there is a variety in existence fit for table use as early as the Early Market. We do not contend that this variety will fully mature tubers earlier than any other sort, but as stated in another description, the potatoes are ready for table use earlier than any sort known. The originator describes it as follows :

"Early Market is very productive, the tubers having the peculiar markings of the Early Ohio, but quite distinct from that variety, as they are more elongated. As the name implies, this variety is especially recommended to grow for early marketing, as it is unsurpassed in quality by any potato, in the early stages of growth or unripe condition, cooking dry and mealy as soon as the tubers have attained a marketable size. This point will be highly appreciated by the market gardeners and others who grow potatoes for the early market, and also those who have their own little garden patch for early use. The tubers are medium to large, light pink or flesh colored, with the specks peculiar to the Ohio class, oval oblong, very uniform in size, eyes flush with the surface; both stem and seed ends are round and full. It is a good keeper, retaining its excellent quality from the time of harvesting until the next planting season."

Price, five pounds for \$1.00 ; ten pounds, \$1.75 ; \$2.50 per peck ; \$8.50 per bushel ; \$20.00 per barrel of 165 pounds.





### **NEW QUEEN.**

ORIGINATED in Maine—which state is by the way noted for its magnificent potatoes. In shape and general handsome appearance it is all that can be desired, which points make it a quick seller in market and at a handsome price; of the Hebron style, but a little more elongated; exceedingly productive and an excellent keeper; a strong grower and able to resist disease and bugs.

In fact one that will succeed in all localities. Medium Early, white and flavor fine.

Price, \$1.00 per half peck, \$1.50 per peck, \$4.50 per bushel, \$9.00 per barrel of 165 lbs.



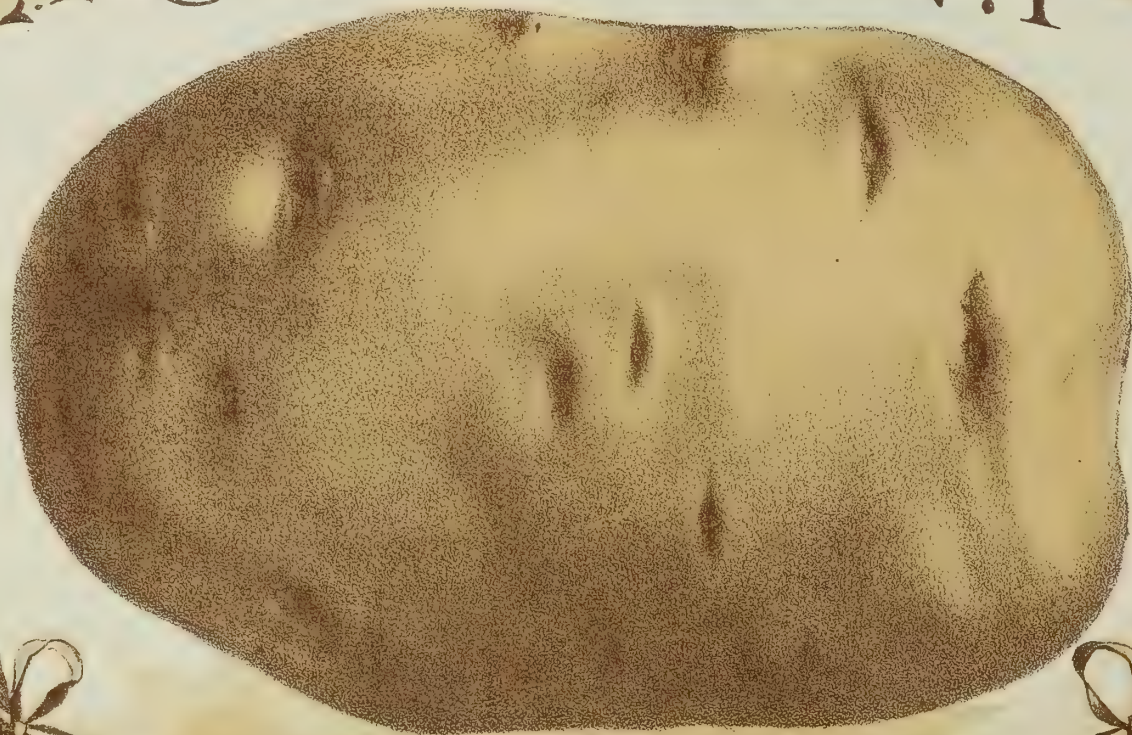


ORIGINATED last season by one of the most successful potato growers in the country, who describes it as follows: "Maggie Murphy Potatoes led at the World's Fair, and in every State in the Union." The following report of the potato exhibit in the Agricultural Building is based on official record and facts, and is copied from *Gardening*: "The novelty in the third division of the Rose class is the 'Maggie Murphy,' (the latest of them all) yielding in the hill test nine pounds and thirteen ounces to the hill, (not a small one amongst them) and 310 bushels to the acre; while the field test gave 574 bushels to the acre." (This is a poor potato season.) This yield, and World's Fair official endorsement will surely satisfy the most ambitious potato grower on earth. Great is the "Maggie Murphy," and to the farmer shall be the profit. Planted in the same field with twenty leading varieties, the Maggie Murphy yielded double the number of bushels of marketable potatoes to the acre of any other variety. They win every time, even in drouth. Of the Rose class, large, well rounded, plump, and flesh fine as silk. Bound to become the universal favorite on account of its enormous yield, fine quality, its strong vigorous growth, and the fact that it has proven blight proof. We will stake our reputation that whoever plants of this variety will make more from it than any potato he may ever have previously planted. Notwithstanding our large stock, we know it will not hold out for all our demands, and we urge all who desire to avail themselves of this valuable sort to do so at once while they can secure them.

Price, \$1.00 per half peck; \$2.00 per peck; \$7.00 per bushel; \$15.00 per barrel of 165 pounds.



# CARMAN NO. 1



HERE we have a variety, which is sure to bring great joy to the heart of the potato grower. To one acquainted with the name "Carman," this would be ample warrant the purchase of a good stock of seed. Carman No. 1 was originated by Mr. CARMAN personally, who is the great editor of the "Rural New Yorker," the most prominent farm paper in the world, and doubtless most of our customers are familiar with its pages. Mr. CARMAN also edited this famous book on potato culture, described in this catalogue. These few points alone will create the desire for a stock of this seed, but let us say a few words more. One acquainted with Mr. CARMAN's reputation and his paper, can readily appreciate the fact that he would never introduce a potato bearing his name, unless it was something extraordinary.

The Carman No. 1 is a seedling from seedlings raised through several generations, with the object of developing good, and suppressing undesirable qualities. It is intermediate in ripening, has only few and shallow eyes, flesh peculiarly white, and, as Mr. CARMAN says, "quality superb" and "a wonderful potato," an enormous yielder, every tuber seeming to mature, leaving no small, unmarketable potatoes in the hill, and does not blight. Perfect keeper. Order now while the stock holds out.

Price, 50 cents per pound; 3 pounds \$1.25; 5 pounds \$2.00; peck \$4.50; bushel \$15.



# OHIO JUNIOR

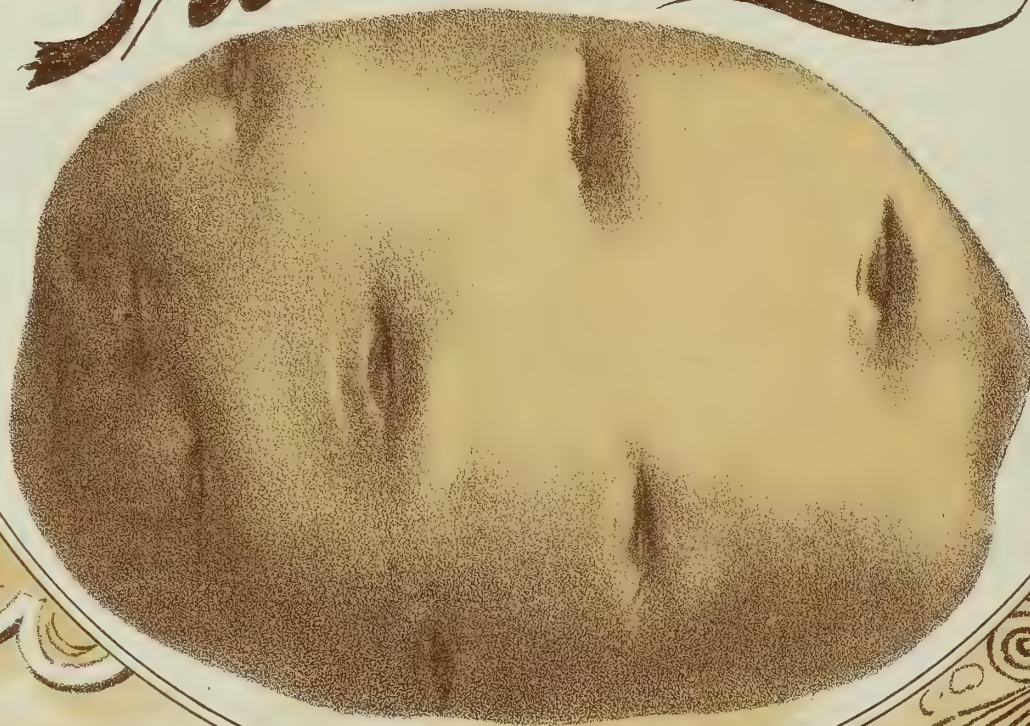


THE best all around extra early potato in the country, and no one acquainted with the true stock of this sort will dispute it. It is a chance seedling of the Early Ohio. It has all the good points of the Early Ohio, only in a more marked degree. No doubt, many parties have purchased and planted what they supposed were true "Ohio Junior," whereas they really have nothing but the Early Ohio, as to one not fully posted, the Early Ohio can from appearances be palmed off for Ohio Junior. Tubers oval-oblong, round at seed end, with full eyes that are almost even with the surface. A fine keeper, magnificent quality and heavy yielder. Has produced fully ripe potatoes for market in sixty days from planting. It has always brought about 25 cents per bushel more on the open market than other best sorts. Of the rose class, distinct. Our stock of this sort last season was not large enough by many hundred bushels to handle our orders for them, which necessitated returning orders unfilled.

Price, \$1.00 per half peck; \$1.50 per peck; \$4.00 per bushel; \$7.50 per barrel of 165 pounds.



# *Irish Queen*



A NEW seedling, five years old, from the seed ball — Wall Orange, fertilized with pollen of Ohio Junior. The entire stock controlled by ourselves. Originated in Manitowoc Co., Wis., by one of the most successful potato specialists in the country. We take much pride in the ownership of this valuable acquisition, and recommend it without hesitation for extensive planting to our many customers throughout the entire country. It is bound to become a main crop potato, possessing, as it does, all the desirable qualities for such a sort: enormous yielder; handsome appearance for market purposes; and the cooking quality, none better.

Here is what the originator says of it, his statement being duly sworn to before a notary.

"It is a creamy white body, splashed with a bronze color (indicating magnificent cooking quality), has shallow but expressive eyes, handsomely surrounded by distinct eyebrows; as a table potato it cannot be recommended too highly; pure white flesh, and very starchy. It was the foremost as a cropper in 1893, and out of 64 sorts planted, it exceeded them all, yielding at the rate of 480 bushels to the acre. I have tried this seedling on all the different soils. It is late as Burbank; vines grow stocky with dark, broad glossy leaves; when growing, it presents a strikingly handsome field of remarkably even, upright tops." We urge every potato grower to plant a sufficient quantity of this seed in the Spring of '95, so as to bring him seed for a good planting for main crop the season following.

We make the price lower than we should for this season, as we are desirous of giving all a chance to start a good seed stock.

Price, \$1.00 per half peck; \$2.00 per peck; \$7.00 per bushel; \$15.00 per barrel of 165 pounds.





### AMERICAN WONDER.

THIS superb variety was offered for the first time last season, adding a most valuable acquisition to the potato family.

This, with the Victor White, it can be safely said, cannot be beat for field culture, in the way of late varieties. Tubers white, large and smooth, of uniform size, somewhat elongated ; slightly flattened ; few eyes, nearly flush with the surface ; quality exquisite, either baked or boiled, and cooks evenly.

It being an enormous yielder, of fine appearance, and one of the very best keepers, makes it a field variety hard to beat.

Price, \$1.00 per half peck ; \$1.50 per peck ; \$4.50 per bushel ; \$9.00 per barrel of 165 pounds.





### EXTRA EARLY BURPEE.

THIS is one of Mr. McCoy's seedlings, of recent introduction. Here is a very early variety hard to beat. About two weeks earlier than Early Ohio. See what the introducer says of it :

"The potatoes are uniformly of good size, entirely free from rough or scabby tubers with very few small ones ; slightly shaded with pink ; the flesh is pure white, remarkably fine grained and of the very best table quality. The tubers grow very compact in the hill, with strong and vigorous foliage of an intensely dark green : it is a sure cropper, *immensely productive*."

In general appearance it is unusually handsome, crowding many other sorts out of the market. Try them ; you will be highly pleased.

Price, \$1.00 per half peck ; \$1.50 per peck ; \$4.50 per bushel ; \$9.00 per barrel of 165 pounds.





### **CROWN JEWEL.**

A SEEDLING of Early Ohio, but not like it in appearance, as it has a white skin. A strikingly beautiful potato and brings a high price in market. Smooth, regular in shape, cooking up floury and evenly clear through, The vines grow vigorously extending deep into the earth; its rapid growth and hardy constitution render it well able to take care of itself against bugs where other varieties have failed. It is one of the very best yielders on the list, and is a general favorite wherever it has been tried; about two weeks earlier than Early Rose, and an excellent keeper.

Price, \$1.00 per peck, \$3.50 per bushel; \$7.50 per barrel of 165 pounds.





### ROCHESTER ROSE.

A SEEDLING of the Early Rose—fully as early, but a better potato in every way. Does well in all sections, whereas the Early Rose has made a failure in many states of late years. Tested beside the Early Rose, Rochester Rose yielded 419 bushels per acre to Early Rose 147. Average size considerably larger than Early Rose, and cooking qualities superior in every way. Tuber somewhat elongated, smooth and handsome; flesh a delicate pink; every potato is good, no hollow ones; cooks very quickly; wonderfully vigorous in growth and as near blight proof as a potato can be; an excellent keeper. We consider this one of the finest varieties on our list for general cultivation and are accordingly growing a very large quantity of them, knowing demand for them will be very heavy.

Price, \$1.25 per peck, \$4.50 per bushel, \$9.00 per barrel of 165 lbs.





### **COLUMBIAN ROSE.**

We discovered this potato in Massachusetts, and although it seems strange to go there for a fine potato, this variety was so extremely promising, we could not resist the temptation to buy a limited quantity at a fabulous price for seed stock. When we know we can place something valuable in hands of our customers, the first price does not cut much of a figure, so we will fill small orders this season for the Columbian Rose. It is early, superior to the old Early Rose in every way; a bounteous yielder, good keeper, good qualities. We have not harvested a crop of this variety up to time this catalogue goes to press and will not be extravagant on description, but are safe in saying that every purchaser of a pound this season will be magnificently paid, and plant the product of his entire crop the year following.

Price, 50c per pound ; three pounds for \$1.25 ; five pounds for \$1.75 ; \$3.00 per peck.





### THE SIGNAL

WITH the exceptions of the World's Fair, Great Northern and Freeman, we are inclined to pronounce this one of the best, if not the best variety listed in this catalogue. It is one of the best *standard early* potatoes yet introduced. Regular in shape, smooth in outline; skin a beautiful flesh color, very bright and clear. Ripens with Early Ohio, or a little earlier. A most striking characteristic is its great vitality and vigor of growth, seeming to be able to withstand all sorts of set-backs. Every piece planted seems to grow and produce wonderfully; we do not know of a variety so early that will out-yield the Signal. Every potato grower and market gardener should have the Signal.

Awarded first premium at the Wisconsin State Fair in 1895, in which state it originated.

Price, \$1.00 per half peck; \$1.50 per peck; \$5.00 per bushel, \$10.00 per barrel of 165 lbs.





### **NYE'S EARLY STANDARD.**

THIS is another early potato of unusual merit. New and distinct, we have grown and sold this variety for two seasons, and it has proved a valuable variety for general cultivation.

Last season it was, with one exception, our heaviest seller.

Matures with or a little earlier than Early Ohio; very handsome in appearance; skin smooth and white; flesh also white and cooks floury and evenly. A bounteous yielder. We paid a prize of \$50.00 on this variety last season.

Price, \$1.00 per peck, \$3.75 per bushel, \$7.50 per barrel of 165 lbs.



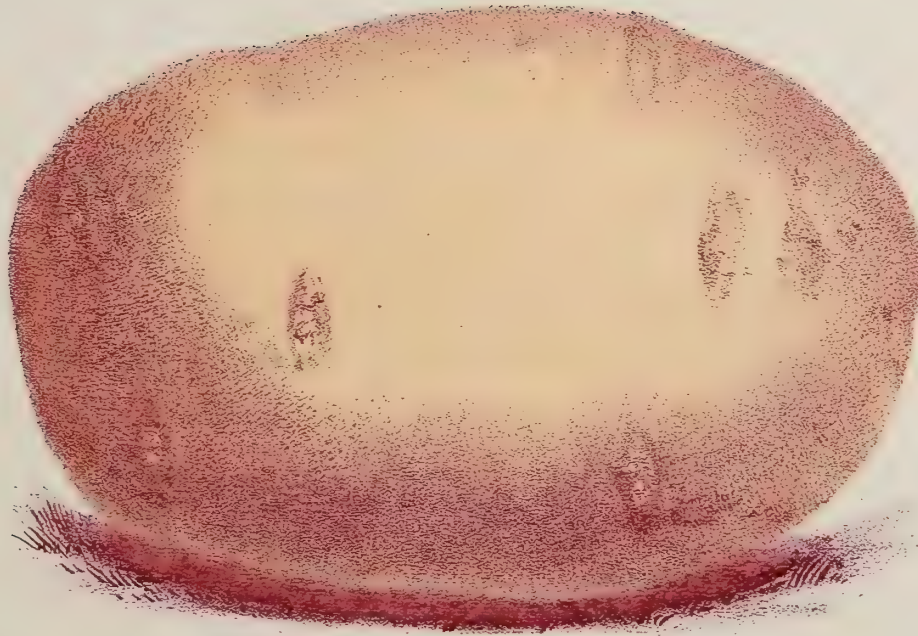


### EARLY PURITAN.

WE have also grown and sold this variety for two seasons and it has done handsomely for us, giving satisfaction in every case. "The introducer describes it as follows: it cooks dry and floury and equal in quality to Snowflake. But the great value of Early Puritan lies in its great productiveness; planted under exactly the same conditions, it has thus far yielded nearly double that of the Early Rose and Beauty of Hebron. Ripens as early as Early Rose, but unlike that variety the tubers when half grown are wonderfully dry and fit for the table,"

Price, \$1.00 per peck; \$3.50 per bushel; \$7.00 per barrel of 165 lbs,





### VICTOR WHITE.

THIS variety originated in New York State last season, the originator—who has made a life work of potato culture—pronouncing it his best late variety, tubers keeping longer with flesh firm than any one of his fifty or sixty varieties. These remarks alone, considering from whence they come, are sufficient to place it in the front rank. He further states that it is the best seller from sample he has ever offered. The following appears in the originator's catalogue, on this variety :

"This valuable new variety was first introduced by us last season. We have tested it on different soils and find it to withstand sudden changes of weather, excessive moisture, and extreme drought to a remarkable degree. Both skin and flesh are pure white; the tubers are covered with a fine netting which always denotes good cooking qualities. It is a strong, rapid grower, standing up well during cultivation, but when fully developed the vines cover the ground completely. This is the handsomest and most productive late potato we have ever seen."

Color white, and in appearance about as pretty as World's Fair and Freeman; cooking quality of the best, every potato seeming to be good; comparatively speaking, shape and surface as smooth as a hen's eggs; few eyes, almost even with surface; very productive. No mistake can be made by planting a few of this variety.

Price, \$1.00 per half peck; \$1.50 per peck; \$4.50 per bushel; \$9.00 per barrel of 165 pounds.



## THE MAPES POTATO MANURE.

Rigid tests made by the most scientific potato growers in this country show the Mapes Potato Manure to be the best fertilizer in existence.

In the great potato contest by the "American Agriculturist" the leading potato manures were used in competition with each other, including Mapes, Stockbridge, Bradley, and others against stable manure.

Following are their reports, published officially :

"847½ bushels of potatoes, with one half ton of the Mapes Potato Manure on one measured acre." From the official report of the American Agriculturist, Dec. 1890.

The following is also from the "American Agriculturist": "Under average conditions, and in far the greater number of cases, we do not hesitate to name the Mapes Potato Manure, as the best and most profitable fertilizer for potatoes. Our own experience with various commercial fertilizers, has convinced us that with judicious use of the Mapes Manures, worn-out lands can be restored to fertility quicker and with less expense, than in any other way,"—American Agriculturist.

Mapes Potato Manure contains: Ammonia 4½ to 5 per cent.; Phosphoric Acid 8 to 10 per cent (soluble and available 8 per cent); Soluble Potash actual 6 to 8 per cent.; all as high grade Sulphate in forms free from Murates (or Chlorides) Magnesia, Lime, etc. 77 to 81 per cent.

For Sweet as well as Irish Potatoes, also for Asparagus, Early vegetables, Tomatoes, Sugar Beets, Sorghum etc., Price \$110.00 per ton; 60.00 per half ton; 500 lbs., \$35.00; \$8.50 per 100 lbs. Not less than 100 lbs. sold.

Not less than 500 lbs. should be used to fertilize one acre of potatoes; from this amount up to 1,000 lbs. should be used, according to state of land, 500 lbs. will be ample for new land.

We maintain as well as others that 500 lbs. of the Mapes Manure will produce as good or better results, than 1,000 lbs. on same ground of any other high grade fertilizer on the market.

Hence it should be worth more than twice as much money, as much labor is saved in addition to the double work it performs. Ordinary blood and bone fertilizers can be purchased at a comparatively low figure, but when comparison is made between this class of fertilizer and Mapes, which contains no superfluous matters, only the very blood of the vegetable it produces, it is by far the cheapest. We consider the Mapes Manure to contain from 30 to 40 times as much plant food, per ton as barnyard manure. It will of course be seen at a glance that no such an amount of barnyard manure, could not be utilized upon an acre of ground. Average barnyard manure contains 1,600 pounds of water to the ton.

The best farmers and all potato growers, who have made a careful study of the matter readily concede that potatoes should be grown on a good commercial fertilizer alone, for the reason that they are much larger, smoother and of far better cooking quality, free from scab or rot, all of which means a considerable advance to the net profits from an acre of ground. Every farmer knows what sort of a looking and cooking potato brings a good price in market, and the progressive farmer who looks ahead and sees these things, puts material into the ground at planting time. When not too large an acreage is put in, making the operation too expensive, we advocate covering the potatoes with about two inches of dirt, and then dropping a small handful of the fertilizer on this covering, and again covering fertilizer; or if preferred a small handful can be dropped in the trench or hill taking care not to place directly on potatoes. We also advocate saving a portion of the supply intended for the ground, until potatoes are up, when a small handful will do wonderful good by dropping by side of hill or between the plants, closely, but not directly on the plants. This can be covered when hoeing or cultivating.

### ANOTHER PLAN FOR USE IS AS FOLLOWS:

May be used in the hills or rows, mixing and covering with earth, provided it is scattered well. Scatter it down the rows, mix as thoroughly as possible in any manner which best commends itself, with plow, hoe, brush, sled, chain, etc.

The quantity of this manure may be increased to one ton per acre, and this quantity is successfully used by many growers, particularly when potato crop is followed by wheat, grass, corn, etc. Where one ton is used per acre apply 1,000 lbs. broadcast after plowing, mix and level down with an Acme or common smoothing harrow. Scatter 500 lbs. in the furrows before planting, and apply at first hoeing on sides of the rows 500 lbs. more, or scatter 1,000 lbs. per acre in furrows before planting. With any ordinary care in mixing in the fertilizer in furrows with small plow or brush, no injury will be done to the tubers.

We claim that this is a complete manure for potatoes, requiring the addition of neither stable manure nor any other fertilizer. Many of the largest growers, who aim for quality as well as quantity of crop use it exclusively.



## A ROTATION—FIVE CROPS—ONE TON OF FERTILIZER IN FIVE YEARS.

1st year, potatoes with one ton Mapes potato manure ; 2nd year, wheat, no fertilizer ; 3rd year, grass, no fertilizer ; 4th year, grass, no fertilizer ; plowed under in fall ; 5th year, corn (on sod) manured with farm manure.

Then potatoes again. Oats may be introduced after potatoes or after corn.

This rotation admits of moderate cost for the five crops and at same time is heavy and profitable manuring for potatoes.

In our own plantings we calculate that an increase in yield by use of the fertilizer will run from 100 to 250 bushels per acre, according to state of ground and how much fertilizer is used. In addition to this yield increase, we depend upon from 10 to 15 cents increase per bushel in market value of potatoes, on account of extra fine appearance, smooth, free from scabs or rot, and finer cooking quality.

Thus we would strike an average table as follows :

From an acre at low estimate 150 bushels extra, Extra market value 10 cents per bushel, Total gain at low estimate	\$67.50
Cost of fertilizer 500 pounds of Mapes	35.00

Net gain per acre by use of Mapes manure	32.50
--	-------

This, understand, is putting it on a low estimate, but with proper treatment and care the extra gain net per acre should be \$50.00 to \$75.00 per acre.

## MAY'S UNIVERSAL COMMERCIAL FERTILIZER.

While the Mapes Manure, before described at length is especially adapted for potatoes, asparagus, early vegetables, tomatoes, sugar beets, etc., the "May's Universal" is adapted to all farm crops, including potatoes, fruits, trees and small fruits, roses, shrubs, corn, all sorts of grain, etc., etc., in fact a universal fertilizer for everything grown on the farm.

While this is an extremely high grade fertilizer it is not of course quite so concentrated as the Mapes Manure, and is not so high in price. For instance in using the "May's Universal" for potatoes one would need to employ, say from one-third to one-half more than of the "Mapes," to produce equal results, and even with this additional quantity we do not consider quite as satisfactory results will be obtained as with Mapes, as this is made especially for potatoes. The "Universal" possessing as it does the many virtues for all general farm crops, necessarily reduces to an extent, the available properties for potato use. For new land however, or land in reasonably good condition, 600 to 1,000 pounds per acre for potatoes will produce high satisfaction, and very handsomely reward for using it.

Price—\$60.00 per ton ; \$35.00 per half ton ; 500 lbs. \$20.00 ; 100 lbs. \$6.00. Not less than 100 lbs. sold.

The sale of high grade commercial fertilizers amongst the better class and progressive farmers, has more than doubled each year for several years past. What does this demonstrate?

Nothing more or less than that it pays magnificently to use them and the best. Orders for this class of goods have never been solicited from the farming element, and under the circumstances it is truly wonderful the millions of pounds that are yearly bought by farmers and gardeners. We are the first firm to introduce these goods through salesmen, amongst the farming element, and in years to come we know that many, many thousand farmers will remember the fact and heartily thank us for it ; showing them the quicker and easier road to prosperity.

## SUPPOSED ADVANTAGES OF THE R. N. Y. TRENCH METHOD.

The enemies to large yields of potatoes are : first, a sufficient supply of suitable soluble food ; second, drought ; third, a compact medium in which to develop. Solubility of food can be secured only by moisture. The potato plant before the tubers begin to form needs no more moisture than most plants with succulent stems and leaves. The tubers are 80 per cent. water, and they develop and mature in a comparatively short period. When they are developing a full supply of moisture must be supplied or the potatoes are checked. Succeeding favorable weather can then induce only a second growth which, though it may add to the bulk of the crop, cannot increase its value.

Trenches, if of ample size, supply a mellow congenial medium for the potatoes' growth. The roots freely extend whithersoever they will, In this unresisting soil the tubers form, grow, and mature. The roots readily find their food, while the mellow deep soil, conserves moisture. It is well-known that surface cultivation in times of drought tends to hold the moisture underneath, The soil of the trenches if properly made, acts throughout, upon the same principle as the surface cultivation. The tubers and roots have nothing to overcome except the comparatively gentle resistance of a yielding soil. The moisture is conserved by porosity. The gentlest rains or even dews readily penetrate and permeate the loose soil ; while evaporation is retarded by the foliage which soon covers the entire trench. Only shallow, level cultivation is given. By the old method the plow or cultivator is run both ways, throwing furrows toward the plants. The fibrous roots are severed, while the plants are, in a measure, deprived of the means of gathering moisture, the severed roots being exposed to the direct action of air and sun, and the heaped up soil acting as a shed which carries the rain from where it is most needed to where it is least needed.



Finally, When potatoes are planted but two or three inches deep in furrows, the growing tubers are necessarily crowded in a very limited space. When planted six inches deep, provided always that the soil above is mellow tuber-bearing stems issue as it were, from several different planes or stories. There are several tiers of tubers fairly separated from one another, instead of being as in the old way, crowded all together. The tubers formed in trenches are of better shape than those in hills, and it is rarely the case that they grow out of the soil, thus becoming sun-burnt and worthless.

#### SOME LEADING POINTS ON THE MAPES POTATO MANURE, ROTATION OF CROPS, ETC.

In view of the strong testimony from the many practical and accepted authorities on Potato Growing, in favor of this manure, it is necessary for us only to call attention to—1st. The greater certainty than with stable manure or any other fertilizer to bring a crop, under the most adverse circumstances.

The solubility and variety of the choicest forms of plant food, as used in this manure, enable it with comparatively little moisture to meet all the varying demands of the crop at all its successive stages of growth. Lack of abundance of available plant food for full feeding during the time the tubers are forming often proves fatal to the crop. Stimulating or partial fertilizers give promise in vines but disappointment in harvest. 2nd. The quantity of the crop from the Mapes potato manure, by reason of generous feeding, the presence of the proper forms of plant food, and absence of injurious materials (such as Chloride) has uniformly been superior to anything ever obtained before the introduction of this manure. This has been repeatedly testified to by the prominent growers and members of the several State Agricultural Societies, Stations, Granges, Agricultural journals and practical truckers in all sections, including such authorities as Dr. F. M. Hexamer, E. S. Brownell, E. S. Carman, Dr. Henry Stewart, J. T. Lovett, Alfred Rose, P. T. Quinn, Theodore F. Baker, Dr. W. S. Combs, and many others. So great has been the influence of this manure on the quality of potatoes and vegetable crops, that practical large truckers claim that they can "well afford to use it at double its cost if only for the superior quality of the crop and freedom from damage by grubs, worms and insects, etc. 3rd. Where potatoes are grown for three or four consecutive years exclusively with this manure, the effect of liberal feeding with varied and choice forms of plant food has been to steadily improve the quality of the tubers to such a degree that even when an inferior potato, but a larger yielder, like the "Peerless" or "Burbank" has been grown, it has more or less slowly been changed into a smooth, bright, highly flavored, mealy (when cooked) potato, rivaling for table qualities the old "Peach Blow." In many cases the extra fine qualities of these common grade potatoes has brought the growers fancy prices for market and for seed, frequently 25 per cent. advance on average market rates. 4th. All attempts on the parts of experimenters to improve upon this manure by mixing it with nitrate of soda, sulphate of ammonia, dried blood, etc., also have failed to render it more effective, either in quality or quantity of product. The addition of either stable or farm manure to the Mapes potato manure (when used in quantities of 1,500 lbs. per acre) has failed to improve the results, but on the contrary, the product in some cases was actually less satisfactory, both in yield and quantity. As Prof. C. A. Goessman, Director of the Massachusetts Agricultural Station, in a recent address truly states:

"An excessive accumulation in the soil of either vegetable or animal matter, or of both, is apt to turn it into a breeding place of injurious parasitic growth," and again: "To manure our lands efficiently, means to-day something more than to incorporate into the soil an exceptionally liberal amount of some incidental refuse matter of ill-defined composition, as barn-yard manure, vegetable composts or wood ashes." 5th. Until the careful scientific experiments in growing potatoes were made, as in the "Rural Experiment Farm Tests," and those of the State Experiment Stations, Granges and others able to carry on the work, it has been supposed that the largest yields and best qualities of results could be obtained from the use of well-rotted stable manure; but now it is not well-rotted stable manure, but the Mapes Potato Manure that is taken as the STANDARD for excellence of results, and in all the experiments and tests one of the objects has been to find a manure, fertilizer or mixture of chemicals that could "beat it." But in none of these attempts have the experimenters been successful. Even in the several hundred experiments under the plan of Prof. Atwater for testing soils, none of the yields have approached those obtained by the Mapes Potato Manure, and the same is true when tested alongside of the most approved mixture of Ammonia Salts, Dissolved Bone, and Potash Salts, tried at the "Rural Experiment Farms" and elsewhere.

Scientific feeding of such crops as Potatoes, Strawberries, Fruits, Sugar Beets, Vegetables, and all quickly-growing, dainty-feeding crops, means a good deal more than simply mixing three materials together which supply Nitrogen, Phosphoric Acid and Potash, irrespective of proper and varied forms.

Special forms adapted to the varied wants of the crops, and even of the same crop at successive stages of growth and changing surrounding conditions of moisture, temperature, etc., are all of equal importance of simply making the soil rich. What will make a rich soil for Onions will drive out and destroy a clover crop and cause other crops to result in inferior, tough, stringy, flavorless, insipid products, unfit for competition in the market or for the table.



Attempts to improve stable manure by adding Ammonia Salts, Dried Blood, etc., so as to "beat the Mapes Potato Manure" have also failed. 6th, The popular view of fertilizers, that they are mainly effective in starting the crop, giving it a good "send off" but insufficient to supply "nature's food" for the normal and healthy maturity of the crop throughout its growth, is largely true with such fertilizers as Superphosphates, Fish Guanos, Peruvian Guano, ordinary mixtures of chemicals, or even hen manure, bone (with or without wood ashes) plaster, etc.; but this estimate of the temporary effects of fertilizers is not applicable in any way to the Mapes Potato Manure or to any of the Mapes Special Crop Manures. 7th. No damage is found to result to the physical texture of the soil by the continued use of this Potato Manure, even to the exclusion of stable or farm manure. As Mr. Joseph Harris, in the *American Agriculturist*, well says:

"If the potatoes have food enough, they can dispense with the mechanical effect of barnyard manure." If you grow large crops you will not suffer for the want of vegetable matter in the soil, even with so limited a root-growing crop as potatoes.

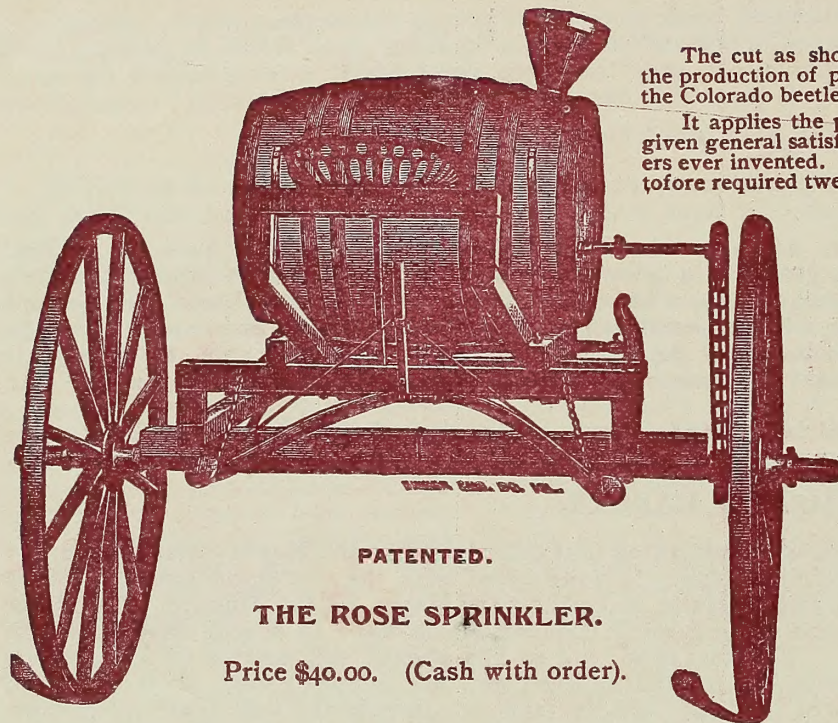
#### SUPERPHOSPHATES VERSUS A COMPLETE MANURE.

The thrifty farmer often asks himself: "Can I not grow as good a crop of potatoes with something that costs less than the Mapes Potato Manure?" In a recent number of the *Connecticut Farmer*, a valued correspondent, "Hockanum Farmer" says: "I quite agree with the correspondent (Dr. Henry Stewart) from Bergen Co., N. J., that the Mapes Corn Manure has produced some wonderful results, as has also the Mapes Potato Manure. I consider them the best of the manufactured articles on the market, although there are others, some of them much cheaper, which have in special instances produced on a par with anything that can be claimed by the Mapes." We answer to this: "Yes, that is so; but so has plaster, salt, nitrate of soda, superphosphates, etc. occasionally brought a large crop under favorable conditions, but always in a soil that in itself was well supplied with plant food, and the crop was fed not so much by any of these partial fertilizers, but from the resources of the land; and the land in consequence was made the poorer. As Dr. Lawes truly says: "Everything that brings a crop is not a manure, at least not in the true sense of the word." A fertilizer may act as a stimulant, and a superphosphate or plaster may, for all practical purposes, act the same as Peruvian guano or nitrate of soda. It may help to dissolve the plant food out of the soil and quicken from its own action the early growth of the plant, but the matured crop cannot get its full nourishment from any such make-shift or whipper-in; it must be fed all around and with certainty by the manure applied, otherwise the manure cannot be expected to prove profitable in the long run or keep the land in condition. This is known to all observing farmers who grow corn on poor land with a "little phosphate in the hill," or wheat on poor land with a "little phosphate in the drill," particularly if they expect any good grass to follow.

#### NOT A SUPERPHOSPHATE WANTED FOR POTATOES.

E. S. Carman, of the *Rural New Yorker*, in commenting on the large yields of potatoes obtained by him at the Rural Farm with his trench method and the Mapes Potato Manure, concludes: "But we don't want a 'phosphate' or 'super-phosphate' or an 'Ammoniated super-phosphate' or a 'swift-sure' or anything of the kind. We want a high grade potato manure."—(*The American Dairyman*, May 1888).





PATENTED.

### THE ROSE SPRINKLER.

Price \$40.00. (Cash with order).

## THE ROSE SPRINKLER.

The cut as shown is a representation of a machine invented and manufactured for the purpose of lessening the cost of the production of potatoes, by decreasing and lightening the labor and freeing the vines from the destructive pests known as the Colorado beetle or potato bug, by the application of Paris Green mixed in water upon the vines.

It applies the poison upon two rows at once, and will cover twelve to fifteen acres per day. This is a machine that has given general satisfaction wherever it has been used. It is one of the cheapest, simplest and most perfect potato bug sprayers ever invented. Any boy that can drive a horse can do and perform, with more ease, the same amount of work that heretofore required twelve men in performing, in the same amount of time.

You have complete control over the quantity of water you wish to throw, opening or closing the valve with a lever. The spraying heads can be adjusted to any position desired, up or down, in or out; all of which can be done while the machine is in motion. The wheels run on tubular axle, and can be shifted for any width of rows, from two to three feet. The agitator is driven by chain belting from the wheel. The chain wheel on the agitator can be shifted in or out. This will keep the poison from settling to the bottom.

By referring to the cut, you will notice our Rose Sprinklers are so constructed, and the holes are so small that the poison liquid comes out like a mist and spreads all over the vines more even than if put on by hand. Without damaging either, as is too often done by the old way of applying the poison.

In this way you can sprinkle the plants no matter how small they are. You have complete control over the quantity of water you wish to throw. Everyone knows that poisoning potato bugs is one of the most laborious and disagreeable work in raising potatoes. In some cases two or three neighbors club together and buy one as it will do for all.

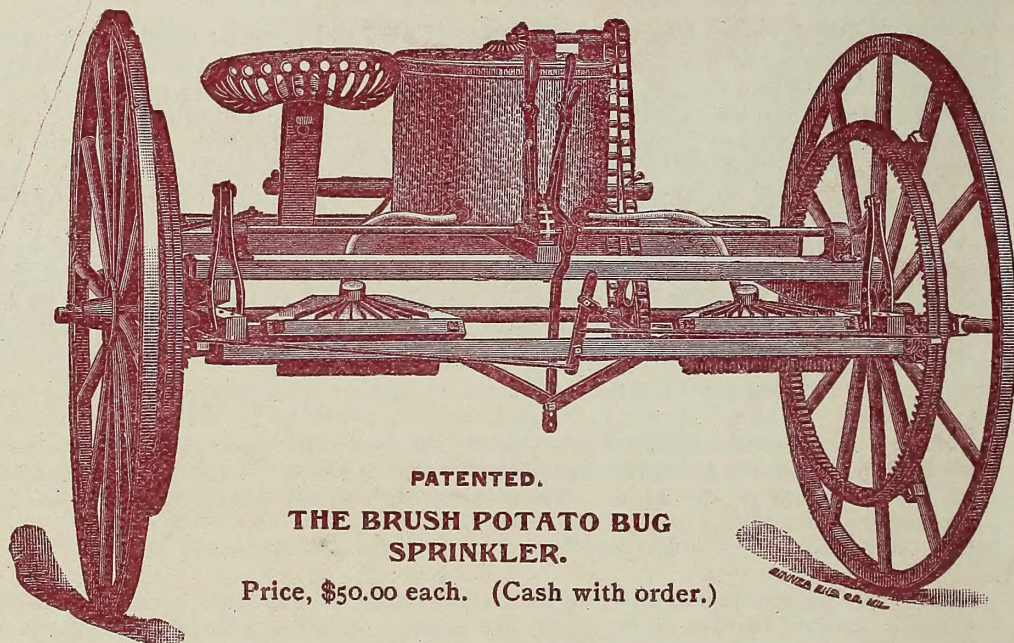
## THE BRUSH POTATO BUG SPRINKLER.

In practice, the poisonous solution let out of the tank on to the shield, runs down the channels formed thereon, and is thus evenly distributed to the circular brushes. These circular brushes being in revolution against the stationary but adjustable brushes, the poisonous solution is distributed in the form of spray and the heavy particles or poison proper is more certainly deposited on the plants to be treated, while at the same time you are enabled to accomplish the desired result with a less quantity of said poisonous solution per acre than is possible with such sprinklers as are in common use.

**FACTS WORTH KNOWING ABOUT BRUSH SPRINKLERS.**—Only from five to seven gallons of water and from five-eighths to three-fourths of a pound of Paris Green are required to the acre. Brush sprinklers are all made to straddle two rows two feet ten inches, or three feet two inches apart.

In again calling your attention to the merits and worth of our potato sprinkler, in the following lines, we beg to state that there is not a single claim that we make which is not strongly endorsed by leading and progressive potato growers of our country. The success that has attended our sprinkler is almost unparalleled in the history of agricultural implements.

Our sprinkler has already forced its way among the leading farming implements of the day, solely on account of its great labor-saving qualities and the accuracy and rapidity with which it does its work. Neither can you realize what an enormous saving of time, money and labor can be effected by its use. If you raise potatoes for the market, you must raise them as cheaply as your competitor. In this you will find our sprinkler a great labor-saving implement. The workmanship of our sprinkler is superior in every respect. With ordinary care our sprinkler will last many years, as there is such a slight strain on its working parts. We offer you a sprinkler of the highest standard and one that will change hard work into easy labor.



PATENTED.

### THE BRUSH POTATO BUG SPRINKLER.

Price, \$50.00 each. (Cash with order.)